

Dr. Rajesh Verma, Assistant professor  
and Head, U.G. Department of zoology  
O.K. College (Buxar) Bihar. Notes  
for B.Sc. 2<sup>nd</sup> paper VI Unit - 2(2)

Ques :- Write Notes on PEST OF SUGAR-  
-CANE their CONTROL...

Ques :- Root Borer (*Eumalacoma depressa*-  
-la)

Root borer is a major sugarcane pest which occurs in some parts of India and Pakistan. It infects sugarcane at all development stages. Infested crops suffer dead hearts and a general yellowing of the leaves. Infestation also results in poor tillering in mature crops.

Sugarcane or sugar cane refers to several species and hybrids of tall perennial grasses in the genus *Saccharum*, tribe Andropogonaceae, that are used for sugar production. The plants are two to six metres (six to twenty feet) tall with stout, jointed, fibrous stalks that are rich in sucrose, which accumulates in the stalk internodes.

Etymology :-

The term "sugarcane" is a combination of two words; sugarcane and cane. The former meaning ultimately derives from Sanskrit (शकर) (shakara) as the crop originated in Southern Asia. As sugarcane was traded and spread west, this became (sukkar) in Arabic, zucchero in Italian, zaccarum in Latin and eventually sucre in both Middle French and Middle English. The second term "cane" began to be used alongside it as the crop was grown on plantations in the Caribbean, this term is ultimately of Hebrew-origin cane.



sugarcane



## History :-

There are two centers of domestication for sugarcane: one for *Saccharum officinarum* by Papuans in New Guinea and another for *Saccharum sinense* by Austronesians in Taiwan and southern China. Papuans and Austronesians originally primarily used sugarcane as feed for domesticated pigs. The spread of both *S. officinarum* and *S. sinense* is closely linked to the migrations of the Austronesian peoples. *Saccharum barberi* was only cultivated in India after the introduction of *S. officinarum*.

*Saccharum officinarum* was first domesticated in New Guinea and the islands east of the Wallace line by Papuans, where it is the modern center of diversity.

## Cultivation :-

Sugarcane cultivation requires a tropical or subtropical climate with a minimum of 60 cm (24 in) of annual precipitation. It is one of the most efficient photosynthesizers in the plant kingdom.

In prime growing regions, such as Mauritius, Dominican Republic, Puerto Rico, Peru, Brazil, Bolivia, Colombia, Guyana, Ecuador, Cuba, El Salvador, Jamaica, Bangladesh, India, Pakistan, Indonesia, Philippines, Malaysia and Australia, sugarcane crops can produce over 15 t/ha of cane.

Production :-

| Sugarcane production in 2018 |                    |
|------------------------------|--------------------|
| Countries                    | millions of tonnes |
| Brazil                       | 746.9              |
| India                        | 376.9              |
| China                        | 108.1              |
| Thailand                     | 104.4              |
| Pakistan                     | 68.2               |
| Mexico                       | 56.8               |
| World                        | 1,907              |

Source : FAOstat, United Nations

Global production of sugarcane



2020

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in 2018 was 1.91 billion tonnes, with Brazil producing 39% of the world total, India with 20%, and China and Thailand producing about 6% each (table).

Worldwide, 26 million hectares were devoted to sugarcane cultivation in 2018. The average worldwide yield of sugarcane crops in 2018 was 72 tonnes per hectare, led by Peru with 121 tonnes per hectare. The theoretical possible yield for sugarcane is about 280 tonnes per hectare per year, and small experimental plots in Brazil have demonstrated yields of 236-280 tonnes of cane per hectare.

### Sugarcane as feed :-

Many parts of the sugarcane are commonly used as animal feeds where the plants are cultivated. The leaves make a good forage for ruminant.

see also :-

- Sugarcane plantations in the Caribbean
- Sugarcane plantations in Hawaii
- Sugarcane industry of the Philippines
- Tropicane